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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-----------------------------|------------------|
| 09/940,467 | 08/29/2001 | Toru Iizuka | 0229-0657P | 5043 |
| 2292 | 7590 | 02/13/2004 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | WYROZEBSKI LEE, KATARZYNA I | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1714 | |

DATE MAILED: 02/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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In view of applicant's amendment mailed on 11/24/2003, which contained many new limitations new search was required and new prior art has to be applied. In view of the above following office action is final necessitated by amendment. Claims 2 and 3 are cancelled and claims 5-8 are added.

Specification

1. The amendment filed on 11/23/2003 to the specification is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The applicants submitted new specification, and although most of the claims were grammatical in nature, amendment to the examples is viewed as a new matter. The applicants first contain the test example, and now want to change its status to comparative examples. Such amendment has no support in specification at all. In addition the applicants attempt to change the amounts of the components in the specification, wherein the examiner was not able to find support for the new numbers. In view of the above, the examiner will not allow for the substitute specification to be entered.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Objections

2. Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. At the present time claim 4 recites the amount of carbon black to be 30-60 parts by weight of rubber. Such limitation is already contained in claim 1.

3. Claim 6 is objected to because of the following informalities: In the instant case, claim 6 appears to be redundant and teach exactly the same limitation as claim 5 (duplicate claim).

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over BEERS (US 6,120,911) in view of NAKANO (US 5,804,002).

The prior art of BEERS discloses composition for wire coat, which is utilized on metallic cords of the tire ply located in belt area. The tire of BEERS is pneumatic tire.

Composition of BEERS comprises 100 parts of synthetic or natural rubber or their mixtures, 45-70 parts of carbon black and curatives (col. 1, line 38-42). The composition BEERS also utilizes adhesion promoters selected from methylene donors and acceptors.

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The methylene acceptors include phenolic compounds such as phenol or resorcinol or its condensation products with aldehydes. The amount of the acceptor is in a range of 2.0-50 pbw (col. 5, line 48-col. 6, line 3).

Methylene donor includes amine compounds such as melamines and their condensation products. The amount of methylene donor in the composition of BEERS is 2.0-5.0 pbw. The ratio of donor to acceptor of 1:1 is therefore taught.

The composition of BEERS is utilized in metallic cords, which have monofilaments having diameters of 0.08-0.5 mm (col. 2, lines 54-57).

The difference between the present invention and the prior art of BEERS are structural limitations of the monofilament cords to which such composition can be applied and a limitation of heavy duty tire. The limitation of cords include end count and angle.

With respect to the above differences, the prior art of NAKAO discloses tire cords, which are to be coated with rubber composition. The resulting cords will be used in truck tires (col. 5, line 7).

According to the picture of the prior art of NAKAO the monofilament cords are rubbing substantially parallel to each other and are embedded in the rubber composition.

According to col. 5, lines 13-16) such cords are at an angle of 18° and the count of cords is 23 or 28 cords per 5 cm (or 50 mm). According to further claim 3 of NAKAO, cords are shaped in a wavy manner.

The composition of BEERS is utilized to coat cords, which are then utilized in belt area of the pneumatic tire. As a result a functional tire having functional belt and plies is formed.

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In the light of the above disclosure it would have been obvious to one having ordinary skill in the art to utilize the composition of BEERS which coats metallic filaments for pneumatic tire to coat the metallic filaments of NAKAO, which are also utilized in pneumatic tire and thereby obtain the claimed invention. Utilizing above composition would still result in formation of a functional tire.

Response to Applicant's Amendment

The applicant's arguments with respect to the prior art applied against claims in the first office action on the merits are considered moot due to discontinuation of this art against present claims.

Drawing

Sometime between the transformation of this application into an image application, applicant's drawings were lost. The examiner apologizes for any inconvenience this may cause, and asks that the applicant provide a copy of the drawings with the statement saying that these are copies of the originally filed drawings.

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8. Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

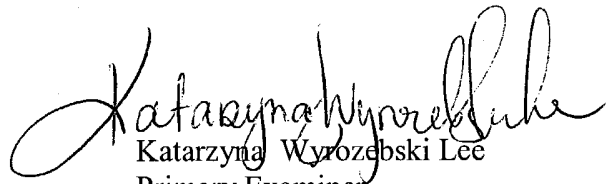
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski Lee whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Katarzyna Wyrozebski Lee
Primary Examiner
Art Unit 1714

kiwl
February 5, 2004